JESC

Product Information Motor-driven Diaphragm Dosing Pumps MEMDOS E/DX

Reliable dosing of chemicals

Motor-driven diaphragm dosing pumps play an important role in the reliable and accurate dosing of liquids in the process cycles. They are appropriate for low-pressure applications and high dosing quantities.

Dosing pumps are used in many branches of industry that work with liquid chemicals - not excluding toxic and aggressive media.

Riding on the crest of the waves

Two models of the MEMDOS are available, each with or without microprocessor control. The smaller version can be used for capacities from 0...4 to 0...160 l/h and the larger version for capacities from 0...170 to 0...380 l/h. Pressures are admissible between 4 and 10 bar, depending on the size.

Thanks to the sturdy tappet drive with manual or automatic capacity adjustment, the conveyed media such as acids, lyes, precipitating agents and flocculents are dosed reliably and precisely.

On request, the MEMDOS pumps can also be supplied with a doublediaphragm system. Then uncontrolled leakage of media is avoided even if the dosing diaphragm wears out.

Versatile and flexible

MEMDOS E pumps can be integrated in controls or automatic control systems.

For constant dosing without control, the motor of MEMDOS E is directly connected to the terminal box. A great variety of three-phase and single-phase motors is available for this purpose.

To change the metering capacity, either the stroke length can be adjusted mechanically or the speed of the three-phase motor can be controlled by means of a separate frequency converter.

The intelligence of the MEMDOS DX is derived from the well-proved series of MAGDOS DE/DX solenoid metering pumps.

The MEMDOS DX controller allows the adaption to a large number of different control signals and system monitoring equipment. For the chemical supply, for example, two controls are available: tank level control with alarm signal and low level indication. The signals required for external activation of the pump can be simple voltage-free closing contacts from water meters or controllers or analog 0/4...20 mA signals. Depending on the version, the MEMDOS DX can be adjusted continuously between 0 and 142 strokes/min. for internal control. A single stroke follows each contact.



In short

- Suitable for accurate mixing tasks
- Capacity range 4 to 393 l/h, at up to 10 bar
- Minor dependence of the back pressure
- Linear development of the dosing quantity according to the stroke length
- Tappet drive with manual and automatic capacity adjustment
- Also suitable for frequency converter operation
- Wide range of dosing head materials
- Double-diaphragm system optional
- Small stand, requires little space
- Batch dosing optional



Technical data

MEMDOS E/DX		Size	4	8	15	25	26	50	75	76	110	150	156	160	200	260	300	380
Capacity at max. pressure**		l/h	4	7.5	15	23	23	48	72	72	107	160	160	170	208	263	292	393
Stroke volume		ml / pulse			2.6				8.5			19			36.5		51.2	54.5
Max. pressure		bar				1	0				5	2	1		10		8	6
Stroke frequency	**	1/min	26	48	95	142	142	95	142	142	95	142	142	71	95	120	95	120
Diaphragm-ø		mm			52				64			90			120		15	50
Stroke length		mm			6					9	9					10		
Suction lift		mbar			900				800			700			600		4	50
Max. ambient temperature*		°C									40							
Capacity E (3~)		W			5	0					250					370		
Power DX (1~)		W			50					1:	20					250		
Insulation class			F															
Protective class			IP 55															
Voltage at pulse i	nput		5 V D	C (mus	t be vo	tage-fr	ee for o	contact	making	g)								
Voltage at level connection			5 V D	C (level	probe	with br	eak coi	ntact fo	r alarm	/empty)							
Alarm reley, volta free changeo- ver contact	ige-		250 \	250 V AC, 2.5 A or 30 V DC, 2.5 A														
Weight plastic	E	kg			7.4				7.6			10.2			18.0		19	9.0
	DX	kg			8.0				9.2			12.0			22.0		26	6.0
Weight stain-	E	kg			8.1				9.5			18.0			26.4		32	2.0
less steel	DX	kg			8.7				11.1			20.0			30.4		39	9.0

*) Ambient temperature for PVC metering head 40 °C and for PP or stainless steel metering heads 60 °C (for a short time 80 °C). **) At 60 Hz operation the values increase by factor 1.2

Model variants

MEMDOS E/DX		Pla	stic			Stainle	ss steel	
	Material	Connection	Orde	er no.	Material	Connection	Orde	er no.
			E	DX			E	DX
4		6/12	10402001	10402019		G 1/4	10402010	10402028
8		6/12	10402004	10402022		G 1/4	10402013	10404586
15	PVC/FPM	6/12	10402002	10402020	1.4571/PTFE	G 1/4	10402011	10402029
25*		6/12	10402003	10402021		G 1/4	10402012	10402030
26**		6/12	10402436	10402857		G 1/4	10402437	10404098
50		6/12	10402005	10402023		G 1/4	10402014	10402032
75*	PVC/CSM	d 16	10402353	10402140		G 1/4	10402015	10402033
76**		d 16	10402451	10404711		G 1/4	10402438	10404100
110		d 16	10402008	10402026		G 1/2	10402017	10402035
150*		d 20	10402009	10402027		G 1/2	10402018	10402036
156**		d 20	10402439	10404080	1.4571/AF	G 1/2	10402440	10404102
160	DD/CSM	d 20	10402053	10402055		G 1/2	10402054	10402056
200	PP/CSM	d 20	10402037	10402045		G 1/2	10402041	10402049
260*		d 20	10402038	10402046		G 1/2	10402042	10402050
300		d 20	10402039	10402047		G 1/2	10402043	10402051
380*		d 20	10402040	10402048		G 1/2	10402044	10402052

*) Pump not suitable for 60 Hz operation **) Special size for 60 Hz operation



Performance curves

The performance curves refer to water at 20 °C (68 °F) and a suction lift of 0.5 m. The performance of the dosing pump depends on the viscosity of the process fluid and hydraulic installation conditions.

Dosing pumps must therefore be gauged in litres during application.





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Туре	A	В	C	D	L	D with ATEX motor
E 160260	278	148	317	approx. 469	22	632
DX 160260	278	148	317	approx. 486	22	-
E 300380	318	153,5	320	approx. 469	22	632
DX 300380	318	153,5	320	approx. 486	22	-

Accessories

Even the best dosing pump is capable of improvement - by means of appropriate technical surroundings. That is why a particularly comprehensive accessories programme is available which turns your dosing pump into an efficient dosing system.

As an option, the multifunctional valve PENTABLOC is available, which offers the functionalities of a back-pressure valve as well as those of a safety blowdown valve. Such functions as anti-siphon, pressure relief and flow indication and monitoring are also integrated.

For further accessories for your dosing pump, please refer to our dosing pump brochure.

To optimise the dosing process, we recommend back-pressure and pressure-relief valves. They are used

- to increase the dosing accuracy in the presence of fluctuating back pressures.
- for long dosing lines in order to prevent excess delivery.
 (The accelerated medium continues moving on account of its own inertia even when the delivery stroke has already ended.)
- to prevent siphoning through the dosing pump if the suction pressure is higher than the system pressure.
- to prevent the system pressure from rising to an impermissibly high level on the discharge side of the dosing pump; this may for example be caused by the accidental closing of valves while the pump is in operation or a clogged injector.



General

Diaphragm metering pumps of the MEMDOS MR series have been developed for a broad range of applications in metering technology. Thus they are used in the industrial sector, in process engineering and very frequently in water and waste water treatment. Diaphragm metering pumps are leakproof.

Standard versions are metering pumps with the head located on the left-hand side. Type MR...L

(Symbol ___)

Upon request, metering pumps with the head on the right-hand side can be supplied. Type MR...R

(Symbol O)

Duplex metering pumps are available with the head combinations shown in the following tables. The heads are arranged in diagonals.

Type ZMR.../...

(Symbol —)

The power of the motor is the same for simplex and duplex metering pumps because the diaphragms operate in a push-pull arrangement.

Metering Head

The heads are available in polypropylene and stainless steel. Special materials upon request.

Suction and discharge valves are double-ball valves up to the MR 290 version; for the bigger pumps, springloaded flat-seat valves are used. For viscous media of 400 mPas and more, spring-loaded single-ball valves are recommended for the suction and the discharge side. The opening pressure of the valve is about 0.1 bar.

Separating chamber

The diaphragm flanges have been designed so that, in the case of a diaphragm rupture due to wear, no chemical can escape randomly from the pump or enter the gear. The leakage is routed downwards through a drain pipe. The diaphragm flanges thus function as a separating chamber and are protected against aggressive media by means of powdery epoxy coating. The escaping leakage can be detected by a leakage probe causing the pump to be stopped (see MB 1 31 01).

Drive

The drive unit consists of an oil-filled worm gear. The stroke is generated by an eccentric which moves back and forth a spring-loaded plunger fixed to the diaphragm. The metering stroke is achieved by the pushing force of the eccentric, the resetting of the spring causes the suction stroke. The stroke length is set by limiting the plunger return by means of a manually adjustable eccentric disk used as a stop.



The stroke length which determines the metering capacity can be adjusted manually during operation between 0 and 100 %.

The standard version is equipped with manual adjustment. Upon request, an automatic remote adjustment (ATE) can be supplied.

Functional diagram





Technical data

The capacity is valid at 50 Hz operation.

Simplex metering pumps

Memdos MR		400	600	980
max. pressure	bar	5	5	4
at max.	l/h	440	640	990
pressure	ml/stroke	165	165	165
strokes/min		47	70	101
diaphragm ø	mm	185	185	185
weight	kg plastic	38	38	38
	SS	48	48	48

Duplex metering pumps with equal heads

Memdos ZMI	र	50/50	75/75	115/115	140/140	210/210	290/290	400/400	600/600	980/980
max. pressure	bar	10	10	10	10	10	10	5	5	4
at max.	l/h	50/50	90/90	135/135	160/160	240/240	290/290	440/440	640/640	990/990
pressure	ml/stroke	20	20	20	37	37	48	165	165	165
strokes/min		47	70	101	70	101	101	47	70	101
diaphragm ø	mm	90	90	90	120	120	150	185	185	185
weight	kg plastic	38	38	38	38	38	40	50	50	50
	SS	48	48	48	48	48	53	60	60	60

Duplex metering pumps with different heads

Memdos Z	MR	50/	400	75/	140	75/	600	115/	210	115	/290	115	/980	140	/600	210	/290	210	/980	290	/980
max. press	.bar	10	5	10	10	10	5	10	10	10	10	10	4	10	5	10	10	10	4	10	4
at max.	l/h	55	440	90	160	90	640	135	240	135	290	135	990	160	640	240	290	240	990	290	990
pressure	ml/stroke	20	165	20	37	20	165	20	37	20	48	20	165	37	165	37	48	37	165	48	165
strokes/min		4	7	7	0	7	0	1()1	1	01	1	01	7	0	10)1	1	01	10)1
diaphragm ø	mm	90	185	90	120	90	185	90	120	90	150	90	185	120	185	120	150	120	185	150	185
weight	kg plastic	4	.9	3	8	4	9	3	8	2	10	4	11	4	1	4	0	4	9	4	9
	SS	5	5	4	8	5	5	4	8	5	53	5	55	5	5	5	0	5	5	5	5

Max. supply pressure (Σ static + dynamic): 500 mbar

Additional components

Upon request, the metering pump can be supplied with an inductive sensor for the eccentric shaft allowing to use the number of strokes for batch processes.

Accessories

Thyristor controller for the control of a d.c. drive (see MB 4 20 01). For further accessories see "Installation example".

Frequency converter

for the control of 3-phase motors. In the case frequency converter operation, a 0.75 kW motor and an external vent must be used.

Performance curves

run with water, suction lift about 0.5 m





Performance curves

run with water, suction lift approx. 0.5 m





















Installation example



Legend

1	Metering pump MEMDOS MR	MB 1 05 02
2	Suction line	MB 1 22 01
3	Electric agitator	MB 1 36 03
4	Tank	MB 1 20 01
5	Relief valve	MB 1 25 01
6	Diaphragm shutoff valve	MB 1 24 01
7	Injection nozzle	MB 1 23 01
8	Pulsation dampener	MB 1 27 01
0	Quuitable au	

9 Switchbox

In the case of duplex pumps with different metering heads the larger head must always be located on the left-hand side (L); for possible head combinations see table MB 1 05 02 / 5.

Dimensions

Model	А	В	С	D	E
50	272	201	370	ø152	228
75	272	201	370	ø152	228
115	272	201	370	ø152	228
140	272	201	370	ø152	228
210	272	201	370	ø152	228
290	296	201	370	□170	225
400	265	225	425	ø230	300
600	265	225	425	ø230	300
980	265	225	425	ø230	300

Dimension L see selection table 5, page 7.



Selection tables

In order to offer the user a wide variety of pumps, the metering pumps have been divided into the most important functional groups. The pump can be made up according to the individual requirements.

Select the pump from the following modules:

1Gear2Motor3Head4Valves5Connections

The numbers on the pump drawing refer to the corresponding selection tables.



Diaphragm metering pump MEMDOS MR

1								
Pump		Simplex	pumps					
model	Left-hand	version L	Right-hand	version R				
MR		Capacity a	djustment					
	manual	ATE	manual	ATE				
400	31247	31248	31440	31441				
600	31249	31250	31442	31443				
980	31251	31252	31444	31445				

	1								
Pump	Duplex pumps								
model	wit	h different head	ls						
ZMR	Ca	pacity adjustme	nt						
	Symbol	manual	ATE						
400/50		31653	31654						
140/75		31655	31656						
600/75		31657	31658						
210/115		31659	31660						
290/115		31661	31662						
980/115		31663	31664						
600/140		31665	31666						
290/210		31667	31668						
980/210		31669	31670						
980/290		31671	31672						

	1								
Pump		Duplex pumps							
model	w	ith equal heads	i						
ZMR	Ca	pacity adjustme	nt						
	Symbol	manual	ATE						
50/50		31253	31254						
75/75		31647	31648						
115/115		31681	31682						
140/140		31649	31650						
210/210		31683	31684						
290/290		31251	31652						
400/400		31261	31262						
600/600		31267	31268						
980/980		31271	31272						

		3	
Pump			
model		Heads	
MR			
	Diaphragm ø	PP	1.4571
50		23721	23727
75	90	23721	23727
115		23721	23727
140	120	23722	23728
210		23722	22728
290	150	23723	22334
400		23735	23736
600	185	23735	23736
980		23735	23736





				2					
E. motor	Part	Circuit	Voltage	Current	Power	Speed	Frequency	Prot.	Class
type	No.		V	consumption A	kW	1/min	Hz	ISO CI.	IP
AF 80 / 4A-11	78629	ΔY	230/400	2.6 / 1.55	0.55	1390	50	F	55
AF 80 / 4B-11	78903	ΔY	230/400	3.5 / 2.0	0.75	1400	50	F	55
AF 80 / 4B-11	78982	ΔY	230/400	3.5 / 2.0	0.75	1400	50	F*	55

* Motor fitted with cold-conductor thermometer probe

				4						
Pump				Stan	dard va	lves				
model MR	MR	5029	0: doubl	e-ball						
	MR	40098	80: sprin	g-loaded v	with Has	telloy spri	ng (disk	valves a	as of 08.97)
		Suc	tion valv	e assemb	ly		Dischar	ge valve	assembly	/
	PP			1.45	71	P	P		1.4571	
		Seals of:								
	Hypalon	Viton	AF	Hypalon	Viton	Hypalon	Viton	AF	Hypalon	Viton
50 290	26841	26842	29694	_		27356	27357	29695	_	
400 980	23703	23704		23705	25681	23703	23704	—	23705	25681
			•							
Pump		Spr	ing-load	ed valves	with H	astelloy s	pring			
model MR	Suc	ction val	ve asser	nbly		Discl	narge va	lve asse	embly	
	PP			1.4571		P	P		1.4571	
					Seals of	:				
	Hypalon	Viton	AF	Hypalon	Viton	Hypalon	Viton	AF	Hypalon	Viton
50 290	26845	25707	29696	_	—	27353	27354	29697	_	

AF = asbestos-free



					5			
Pump		D	imen	sions			Part No.	
Model							Version	
MR	DN	Abb.	di	da	L	PVC	PP	St. steel
50	8	С	-	12	22	25923	-	-
75		E	-	10	51	-	-	25926
115	10	В	9	15	41	25921	-	25925
		С	-	16	22	27672	27664	-
		D	-	G 3/8	22	25930	33797	27037
50	15	В	16	26	50	25936	35649	25935
75		С	-	20	22	25937	35490	-
115		D	-	G 1/2	22	25943	33798	25944
140		E	-	18	44	-	-	25939
210		F	-	-	47	25956	-	-
290		F	-	-	53	-	-	25957
400	20	D1	-	G 3/4	40	24076	-	24065
400	25	B1	25	34	70	24034	-	24063
600		C1	-	32	40	21488	33770	-
980		D1	-	G1	40	28458	34717	27040
		E1	-	28	80	-	-	27852
		F1	-	-	60	25622	-	25623
		G1	-	32	75	34050	34570	-
	32	C1	-	40	44	21491	34828	-
		D1	-	G 1 1/4	40	-	32759	25252





D Threaded connection

E Screwed (Ermeto) connection

connection

ıdα









Order example

For metering aluminum sulfate and sodium hypochlorite, metering pumps are required.

Given operating data:

380 l/h aluminum sulfate, max. pressure 4 bar 45 l/h sodium hypochlorite, max. pressure 3 bar Mains voltage: 230/400 V, 50 Hz

In this example, both chemicals shall be metered at a fixed ratio. Therefore a manually adjustable duplex pump ZMR 400/50 should be ordered. Resistant head material: PP

The suction and discharge valves are determined according to the resistance of the sealing materials. Hypalon is resistant to aluminum sulfate. Viton is resistant to sodium hypochlorite.

The order reads as follows:

The metering pump is made up of the following modules:

1	Gear ZMR 400/50	Part No. 31653
2	Drive motor	78629
3	Head for MR 400 Head for MR 50	23735 23721
4	Suction valve for MR 400 Discharge valve for MR 400 Suction valve for MR 50 Discharge valve for MR 50	23703 23703 26842 27357
5	Suction connection for MR 400 Discharge connection for MR 400 Suction connection for MR 50 Discharge connection for MR 50	24034 24076 25936 27672





The Smart series

MEMDOS SMART LK - stepper motor-driven diaphragm dosing pumps 5 – 19.2 l/h, up to 15 bar



Reliable dosing of chemicals

The compact stepper motor pump, coupled with its intelligent drive concept, combines the big advantages of a solenoid-driven diaphragm dosing pump with the precision of a motor-driven diaphragm dosing pump. The MEMDOS SMART LK series is available in four capacity ranges that deliver between 5 and 19.2 l/h against pressures of up to 15 bar.

Several different materials and connections are available for suction and discharge side, depending on the specific applications. A coordinated accessory set consisting of hoses, injection nozzles and suction lines enables fast installation, while achieving optimum results.

Wide range of applications

The MEMDOS SMART LK's drive is fully adjustable. The stepper motor with its wear-free tooth belt drive, ensures a particularly homogeneous and gentle dosing process. This produces an almost constant supply stream, which gives a low-pulsation dosing.

In addition, the MEMDOS SMART LK gives you the possibility to reduce the suction speed in two steps to easily and more precisely dose even viscous dosing media.

The MEMDOS SMART LK doesn't just impress with its elegant design; the graphical display with a multi-language menu as well as the dosing pump's operation using the integrated keyboard simplifies its use.

Using position detection in the pump, after an unexpected shut down of the pump, overdosing can be prevented and downtime resulting from this can be excluded.

Functions

- Output range from 5 19.2 l/h, up to 15 bar
- Power supply unit 110 240 V, 50/60 Hz, IP65, 25 W
- Microprocessor controlled drive
- Integrated dosing head venting facility (only MEMDOS SMART LK 5 and LK 10 with dosing head made of plastic)
- Suitable for wall and floor mounting
- Material finishes PVC, PP, PVDF and stainless steel
- Stroke frequency can be precisely adjusted via the keyboard
- Graphic display with multi-language menu
- Pulse input (increase and reduction)
- Level input with early warning and main alarm
- Release input for external start/stop
- · Supply amount displayed in various units
- Maximum delivery rate can be limited
- Diaphragm replacement programme
- One Slow Motion setup possible
- Stroke feedback output
- Alarm relay output



Technical specifications

MEMDOS SMART	LK		5	10	15	20	
Delivery conseity	at may had process	l/h	5.3	10.8	14.2	19.2	
Delivery capacity	at max. back pressure	ml/stroke	0.59	1.2	1.58	2.13	
Max. delivery pres	ssure	bar	15	9	5	4	
Dolivory conacity	at avorago back proseuro	l/h	6	11.3	14.7	19.7	
Delivery capacity	at average back pressure	ml/stroke	0.67	1.26	1.63	2.19	
Average delivery	oressure	bar	8	5	3	2	
Nominal stroke fre	equency	RPM		15	50		
Suction lift for nor	n-gassing media	mWS		3	}		
Max. supply press	sure	mbar		80	00		
Diameter of diaph	ragm	mm	39 54				
Valve size			DN4				
Voltage supply			110 – 240 V, -10 % / +5 %, 50/60 Hz				
Power consumption	on	W	25				
Protection class			IP65	(with covering ca	ps on the connecti	ons)	
Insulation class				F	:		
Material				PVC, PP, PV	DF, 1.4571		
Weight	PVC, PP, PVDF	kg		~ 2	2.2		
weight	Stainless steel (1.4571)	kg		~ 3	3.3		
Permitted ambient temperature °C			5 - 45 (with PVC parts $5 - 40$)				
Permitted media t	emperature	°C	80) (with PVC parts 3	5; with PP parts 6	0)	

Delivery characteristic curves

These delivery capacities were determined on the manufacturer's test stands. They apply at 20 °C (68 °F) for water, at 100 % stroke frequency. The delivery capacity depends on the medium (density and viscosity) and temperature. Since these conditions vary at every installation location, you should calibrate the dosing pump.



Conveying characteristics

For low supply rates, for example, the dosing pump performs the suction stroke at the maximum speed and adjusts the speed of the pressure stroke to match the desired supply rate. This produces an almost constant supply stream, which gives a low-pulsation, smooth dosing.



Pressure [bar]



Dimensions

MEMDOS SMART LK 5, 10 with dosing head made of PVC, PP or PVDF

All dimensions in mm



MEMDOS SMART LK 5, 10 with dosing head made of stainless steel 1.4571

All dimensions in mm







MEMDOS SMART LK 15, 20 with dosing head made of PVC, PP, PVDF or stainless steel 1.4571

All dimensions in mm





Connection	Material	Scale	Nominal width	L
		4/6 mm	DN4	31 mm
		1/4x3/8"	1/4"	34 mm
Hose clamp connection	FVG, FF, FVDF	6/9 mm	DN6	34 mm
nose clamp connection		6/12 mm	DN6	15 mm
	Stainless steel (1.4571),	4/6 mm	DN4	50 mm
	PVDF	6/9 mm	DN6	54 mm

You will receive further connection possibilities for your dosing pump upon request.





MEMDOS SMART LK standard - accessories













Suction lines

Type SL-2 with ceramic reinforcement piece, cable length 3,000 mm, tube length 2,500 mm. Level monitoring and pre-alarm with 2 switching points, switching distance approx. 50 mm. Switching function: Closer on rising level, electrical connection to dosing pump via plug connector M12x1. Flexible suction line, SA model with foot valve and load part made from ceramic and 2,500 mm hose length.

Injection nozzles

From the connection of the dosing line to the dosing point. Injection nozzle type R , spring-loaded, opening pressure 0.1 bar $\,$

Suction and pressure tube

Permissible operating pressure at 20 °C in accordance with DIN EN ISO 7751, chemical resistance and correct connection are assumed.

Back pressure and pressure relief valves

Back pressure valves to be mounted in the dosing line. Adjustable pressure 1 – 16 bar Pressure relief valves to be mounted in the dosing line. Adjustable pressure: Plastic 1 – 16 bar, stainless steel 1 – 25 bar

Wall bracket and connecting piece

Wall bracket including mounting material for mounting pumps. Material: PP Connecting piece and mounting hardware required to fit the pump to a water meter. Material: Cast aluminium, coated

Various cables, plugs and adapters

Cable for: external release of pulse output A-coded, 0/4 - 20 mA and pulse input A-coded, cable for alarm B-coded, level monitoring A-coded, Ethernet network connection D-coded.

Plug connector: for retrofitting existing suction lines or level monitors.

Adapter: when using older suction lines with a 3.5 mm jack plug; when using a suction line with M12x1 plug connector.



Reliable dosing of chemicals

Motor-driven diaphragm dosing pumps play an important role in the reliable and accurate dosing of liquids in process cycles. They are appropriate for low-pressure applications and high dosing quantities.

Dosing pumps are used in many branches of industry that work with liquid chemicals - not excluding toxic and highly-aggressive media.

Riding on the crest of the waves

Two sizes of the MEMDOS LB series are available. A large coverage in terms of performance and chemical resistance is available, thanks to the variety of dosing heads, combined with a wide range of dosing head materials.

The performance ranges from 0 - 325 gph. The maximum permitted pressure, depending on the size, is between 58 and 232 psig.

Thanks to the sturdy tappet drive with manual or automatic capacity adjustment, the conveyed media such as acids, lyes, coagulants and flocculants are dosed reliably and precisely.

On request, the MEMDOS LB pumps can also be supplied with a double diaphragm system, therefore avoiding uncontrolled leakage of media if the dosing diaphragm wears out.

Versatile and flexible

The MEMDOS LB can be used when the integration of the pump into external controls or control circuits is required.

For constant dosing without a controller, the powercord of the MEMDOS LB is directly connected to the terminal box. A variety of three-phase and singlephase motors is available for this purpose.

To adjust the dosing capacity, either the stroke length can be adjusted mechanically/automatically or the speed of the three-phase motor can be regulated by means of a separate variable frequency drive.



In Short

- Capacity range 0 to 325 gph, up to 232 psig
- Minor dependence of the backpressure
- Infinitely variable stroke frequency from 0 to 100%
- Tappet drive with manual and automatic capacity adjustment
- Materials available: PVC, PP, PVDF and stainless steel
- Compact design, low space requirement
- Material consistency for the pumps and accessories
- A variety of three-phase and single-phase motors are available
- Double-diaphragm system (optional)
- ATEX versions for Zones 1 and 2 are available
- Also suitable for variable frequency drive operation



Technical	Data											
MEMDOS LB			4	4-HP	10	10HP	20	20HP	35	60	80	150
Delivery capacity	50 Hz	anh	1.06	2.22	3.70	6.35	5.82	9.52	9.52	16.67	23.81	41.27
at maximum	60 Hz	ghu	1.3	2.7	4.4	7.6	7.0	11.4	11.4	20	29	50
backpressure	ml/stroke		2.7	5.4	2.7	5.4	2.7	5.4	8.6	8.6	21.4	21.4
Max. back pressur	e	psig	174	232	174	232	174	174 232 145		45	72	
Max. stroke	50 Hz	DDM	2	26	7	2	120 72		72	120	72	120
frequency	60 Hz	INFIVI	31.2	31.2	86	5.4	144 86.4 2		144	86.4	144	
Suction head for no media	on-gassing	ftH ₂ O			2	9	26			26	2	3
Max. inlet pressure	9	psig					7.3	PSI				
Stroke length		mm			0.	.3"				0.	4"	
Nominal valve widt	h				D	N4			DI	N6	DN	10
Voltage supply						1	.15V (230	V optiona	l)			
Motor efficiency					Gre	ater than	90% (ene	rgy efficie	ncy class	IE4)		
Protection class							IP	55				
Insulation class								F				
	PVC					9	.9				1	3
Weight	PP	lb				9	.9				1	3
(without a motor)	PVDF	10				10).6				16	5.5
	Stainless Steel					13	3.2				24	.7
Max. ambient tem	perature	°F			PVDF, S	Stainless	Steel 41-1	L13º (104	° with PV	C parts)		
Max. temperature of th	ne medium	°F			176	^o (with PV	C parts 9	5°; with P	P parts 1	40°)		

MEMDOS LB			110	160	210	260	310	400	510	760	1010
Delivery capacity	50 Hz	anh	30.2	38.1	55.6	69.8	77.8	103.2	133.3	196.8	269.8
at maximum	60 Hz	gpn	36	46	67	84	93	124	160	236	324
backpressure	ml/stroke		21	4	38	.1	55	5.3		170	
Max. back pressure		psig		14	15		116	87	5	8	44
Max. stroke	50 Hz	DDM	96	120	96	120	96	120	53	76	107
frequency	60 Hz	RPIVI	115	144	115	144	144 115 144		64	92	128
Suction head for non-gas	sing media	feet	2	3	19 14 3						
Max. inlet pressure		psig			7.3 PSI						
Stroke length		mm			0.4	4"				0.5"	
Nominal valve width			DN	10		DN	15			DN25	
Voltage supply						115V	(230V opt	ional)			
Motor efficiency					Greater	than 90%	(energy ef	ficiency cl	ass IE4)		
Protection class							IP 55				
Insulation class							F				
	PVC		19	.8	21	.6	25	5.4		39	
Weight	PP	lb	19	.8	21	.6	25	5.4		30	
(without a motor)	PVDF	U	21	2	23	.6	28	3.7		35.7	
	Stainless Steel		31	5	38	.4	51	1		79.4	
Max. ambient tempera	ature	°F	41-113° (104° with PVC parts)								
Max. temperature of th	ne medium	°F		PVDF, St	ainless Ste	eel 176º (v	vith PVC pa	arts 95°; w	ith PP par	ts 140º)	



Delivery Characteristic Curves

The supply performance graph is valid for 20°C (68°F) for water at 100% stroke frequency. The delivered capacity depends on the medium (density and viscosity) and temperature. Dosing must therefore be calibrated during practical use.



 Total
 Metering

 Fluid
 Transfer

 Management
 Chem Feed



Dimensions





4.65







MEMDOS LB 110, 160 - 1010

Size	4-20	35-60	80, 150	110, 160	210-260	310-400	510-1010
A	4.96	5.87	9.80	9.45	10.55	12.30	13.86
В	4.57	4.78	5.24	6.30	6.70	6.89	7.28
С	9.96	10.24	11.18	12.80	13.19	13.39	14.37
D (standard motor)	15.31	15.31	15.31	17.20	17.20	17.20	17.72
1			Depends on	the connection t	vpe and size		

All dimensions in inches

MEMDOS LB 4 - 80 and 150

Accessories

Suitable sets of accessories, which consists of a suction line, a pressure line and an injection nozzle, are available for the dosing pumps. Even the best pump can still be improved - namely by the right accessories. To make your dosing pump into an efficient dosing system, we recommend using the following accessories:

- Injection nozzles to dose the medium in the main line and to prevent it flowing back into the pressure line
- Pressure loading and relief valves to increase dosing accuracy or to protect the system against excessive pressure

- Pulsation dampener to dampen supply currents as well as to reduce the flow resistance in long pipelines.
- Priming aids to significantly ease priming of dosing pumps with low supply volumes per stroke, for large suction heights, for highly viscous dosing media or for initial priming or when priming after the system has been laying idle
- Suction pressure regulator to prevent medium flow when the dosing pump is not running or to prevent a vacuum being formed in the event of a pipe burst

For further accessories for your dosing pump, please refer to our dosing pump brochure.



Reliable dosing of chemicals

Motor-driven diaphragm dosing pumps play an important role in the reliable and accurate dosing of liquids in process cycles. They are appropriate for low-pressure applications and high dosing quantities.

Dosing pumps are used in many branches of industry that work with liquid chemicals - not excluding toxic and highly-aggressive media.

Riding on the crest of the waves

Two sizes of the MEMDOS LP series are available. A large coverage in terms of performance and resistance is available, thanks to the variety of dosing heads, combined with a wide range of dosing head materials.

The performance ranges from 1.1 up to 41 gph for the first size, and 30 up to 270 gph for the second size. The maximum permitted pressure, depending on the size, is between 58 and 232 psig.

Thanks to the sturdy tappet drive with manual or automatic capacity adjustment, the conveyed media such as acids, lyes, coagulants and flocculants are dosed reliably and precisely.

On request, the MEMDOS LP pumps can also be supplied with a double-diaphragm system. Then uncontrolled leakage of media is avoided even if the dosing diaphragm wears out.

Versatile and flexible

The MEMDOS LP is used when the integration of the pump into controls or control circuits is required. For integration into demanding automation networks, a version with an Ethernet-based MODBUS interface is available.

The MEMDOS LP doesn't just impress with its elegant design; the graphical display with a multi-language menu as well as the dosing pump's operation using the integrated keyboard simplifies its use.

If required, the dosing pump can be controlled via an analogue or pulse input. To react to any variations in the control circuit, the pump has many additional functions; stroke remote reporting, external operation consent, level monitoring, fault reporting via a relay as well as diaphragm rupture monitoring.



In Short

- Capacity range 0 to 270 gph, at up to 232 psig
- Minor dependence of the backpressure
- Graphical display with multi-language menu
- Precise pump adjustments using the keyboard
- Supply amount displayed in various units
- Infinitely variable stroke frequency from 0 to 100%
- Calibration functionality
- External control via standard signal 0/4 20 mA
- External control via floating contacts with impulse increase and reduction
- Materials available: PVC, PP, PVDF and stainless steel
- Diaphragm breakage detection and reporting (optional)
- Compact design, low space requirement
- Material consistency for the pumps and accessories
- Double-diaphragm system (optional)
- Ethernet interface (optional)
- Batch dosing with interval and timer function



Technical I	Data											
MEMDOS LP			4	4-HP	10	10HP	20	20HP	35	60	80	150
Delivery capacity at backpressure (50/6	maximum 60 Hz)	gph	1.1	2.2	3.7	6.0	5.8	9.6	9.5	16.7	24	41
Max. supply pressu	re	psig	174	232	174	232	232 174 232 145			7	3	
Max. stroke frequen	cy (50/60 Hz)	SPM	26	26	72	72	120	120 72 120 72			120	
Suction head for non-	gassing media	feet	29 26 2				3					
Max. supply pressu	re	psi					7.3	PSI				
Stroke length		inch	0.3" 0.4				4"					
Stroke volume		ml/stroke	2.7	5.4	2.7	5.4	2.7	5.4	8.6	8.6	19.3	21.4
Nominal valve width	ı				D	N4			DI	٧6	DN	110
Voltage supply						1:	15V (230	OV optiona	al)			
Motor efficiency					Grea	iter than S	90% (ene	ergy efficie	ency class	s IE4)		
Protection class							IP	55				
Insulation class								F				
	PVC					2	4				2	7
Weight	PP	lle				2	4				2	7
(without a motor)	PVDF	a				2	4				3	0
	14571					2	7				3	8
Max. ambient temp	erature	°F				41-113	°F (104°	F with PVC	C parts)			
Max. temperature of the	emedium	°F			176°F	(with PVC	parts 9	5°F; with F	PP parts	140°F)		

MEMDOS LP			110	160	210	260	310	400	510	760	1010
Delivery capacity at maxibackpressure (50/60 Hz)	imum	gph	30	38	56	70	78	103	133	197	270
Max. supply pressure		psig		14	45		116	87	5	8	44
Max. stroke frequency (50)	/60 Hz)	SPM	96	120	96	120	96	120	53	76	107
Suction head for non-gassing	g media	feet	2	3	1	9	1	4		3	
Max. supply pressure		psi					7.3 PSI				
Stroke length		inch			0.	4"				0.5"	
Stroke volume		ml/stroke	2.7	5.4 2.7 5.4 2.7 5.4 8.6 8.6						19.3	
Nominal valve width			DN10 DN15 DN25								
Voltage supply						115V	(230V opt	ional)			
Motor efficiency					Greater	than 90%	(energy ef	ficiency cl	ass IE4)		
Protection class							IP 55				
Insulation class							F				
	PVC		3	9	4	1	4	5		55	
Weight	PP	lb	3	9	4	1	4	5		55	
(without a motor)	PVDF	10	4	1	4	3	4	8		61	
	1.4571		5	1 58 71 104							
Max. ambient temperatur	re	°F	41-113°F (104°F with PVC parts)								
Max. temperature of the n	nedium	°F			176°F (wi	th PVC pa	rts 95°F; w	ith PP par	ts 140°F)		



Flow curves

The flow curves are valid for ambient temperatures of $68^{\circ}F$ ($20^{\circ}C$) and dosing water at 100% stroke frequency. The delivery capacities depend on the medium (density and viscosity) and temperature.



Motor-driven Diaphragm Dosing Pump - MEMDOS LP





Accessories

Suitable sets of accessories, which consists of a suction line, a pressure line and an injection nozzle, are available for the dosing pumps. Even the best pump can still be improved - namely by the right technical periphery. To make your dosing pump into an efficient dosing system, we recommend using the following accessories:

- Injection nozzles to dose the medium in the main line and to prevent it flowing back into the pressure line
- Pressure loading and relief valves - to increase dosing accuracy or to protect the system against too high a pressure
- Pulsation dampener to damp supply cur-rents as well as to reduce the flow resistance in long pipelines.
- Priming aids to significantly ease priming of dosing pumps with low supply volumes per stroke, for large suction heights, for highlyviscous dosing media or for initial priming or when priming after the system has been laying idle
- Suction pressure regulator - to prevent medium flow when the dosing pump is not running or to prevent a vacuum being formed in the event of a pipe burst

Size	4-20	35-60	80, 150	110, 160			
А	4.96	5.87	9.80	9.80			
В	4.57	4.78	5.24	6.30			
С	10.87	11.14	12.09	12.80			
D	16.22	16.22	16.22	16.93			
Е		3.90		4.21			
L	Depe	nds on the conr	nection type an	d size			
			510-1010				
Size	210-260	310-400	510 -:	1010			
Size	210-260 10.55	310-400 12.30	510- :	1010 .86			
Size A B	210-260 10.55 6.69	310-400 12.30 6.89	510- 13 7.28 (6	1010 .86 6.83*)			
Size A B C	210-260 10.55 6.69 13.19	310-400 12.30 6.89 13.39	510- 13 7.28 (6 14.37 (2	1010 .86 5.83*) 13.33*)			
Size A B C D	210-260 10.55 6.69 13.19 16.93	310-400 12.30 6.89 13.39 16.93	510-: 13. 7.28 (6 14.37 (: 18	1010 86 5.83*) 13.33*) .11			
Size A B C D E	210-260 10.55 6.69 13.19 16.93	310-400 12.30 6.89 13.39 16.93 4.1	510- : 13. 7.28 (6 14.37 (: 18 21	1010 86 5.83*) 13.33*) .11			

 $\frac{2}{5}$

* with dosing head of stainless steel All dimensions in inches

For further accessories for your dosing pump, please refer to our dosing pump brochure.



Reliable dosing of chemicals

Stepper motor driven diaphragm pumps are particularly suitable for highly accurate, reproducible applications due to their design. Most chemicals can be safely fed into the respective processes using these pumps.

Precision that inspires

The MEMDOS SMART LB series is available in four sizes for metering applications ranging to 5.20 gph against pressures of up to 232 psig.

The compact stepper-motor pump, coupled with its intelligent drive concept, combines the big advantages of a solenoid-driven diaphragm dosing pump with the precision of a motor-driven diaphragm dosing pump.

A variety of materials and connections are available depending on the specific applications. By using appropriate and recommended materials, the MEMDOS SMART LB can be used in many process applications.

A matching accessory kit with hoses, injection nozzles and suction lines from our comprehensive accessory range means that nothing stands in the way of a quick installation, and you get the best results.

Wide range of applications

The MEMDOS SMART LB's drive is fully adjustable. The stepper-motor with its wear-free tooth belt drive, ensures a particularly homogeneous and gentle dosing process. Pressure and suction strokes can be performed at different speeds. This produces a constant supply stream, which gives you low-pulsation dosing. To adapt the dosing performance, the stroke frequency can be manually adjusted across the range from 0 to 100%.

As a Plug & Play dosing pump with a universal power supply unit, the pump is ready for immediate, unlimited, and international application.

MEMDOS SMART LB can be mounted on the wall in three different positions - upright, left-oriented or right-oriented - without further auxiliary equipment.



In Short

- Capacity range to 5.20 gph, up to 232 psig
- Wide range power supply 110 ... 240 V AC, -10% / +5%, 50/60 Hz, 25 W
- Infinitely variable stroke frequency from 0 to 100%
- Calibration functionality
- Fully controllable stepper-motor drive
- Accurate dosing thanks to the double-ball valves
- Materials: PVC, PP, PVDF and Stainless Steel
- Compact design, low space requirement
- Integrated dosing head venting device (plastic version)
- Wall and floor mounting possible without a bracket
- Supplied with connection sets (plastic version)
- Material consistency from pump to accessories



Technical Data					
MEMDOS SMART LB		5	10	15	20
Delivery capacity at max. pressure	gph	1.4	2.85	3.75	5.07
Max. supply pressure	psig	232	145	72	58
Delivery capacity at medium pressure	gph	1.59	2.98	3.88	5.20
Average back pressure	psig	116 72 4		44	29
Max. stroke frequency	SPM	150			
Suction head for non-gassing media	ft. H ₂ O	9.8			
Max. supply pressure	psig	11.6 PSI			
Nominal valve width		DN4			
Voltage supply		110 to 240 V AC, - 10%/+5%, 50/60 Hz			
Power consumption	W	25			
Protection class		IP 65 (with covering caps on the connections)			าร)
Insulation class		F			
PVC, PP, PVDF		~ 4.85			
1.4571	U	~7.27			
Max. ambient temperature	°F	with 316SS/PVDF 113° (104° with PVC parts)			ts)
Max. temperature of the medium	°F	with 316SS/PVDF 176° (with PVC parts 95°; with PP parts 140°)			

Delivery characteristic curves

The delivery characteristic curves are valid for 68°F (20°C) for water at 100% stroke frequency. The delivery capacity depends on the medium (density and viscosity) and temperature. Dosing pumps must therefore be calibrated in gph during application.





Dimensions





MEMDOS SMART LB 5 and 10 with dosing head made of PVC, PP or PVDF





MEMDOS SMART LB 15 and 20 with dosing head made of PVC, PP or PVDF



MEMDOS SMART LB 5 - 20 with dosing head made of stainless steel



All dimensions in inches.

Material	Size	Nominal diameter	L
PVC, PP, PVDF	4/6mm	DN4	1.22"
	1/4" x 3/8"	1/4"	1.34"
	1/4 x 7/16	DN4 1/4" DN6 DN4	1.34"
316 SS	1/4" FNPT	DN4	1.96"
	1/4" FNPT	DN6	2.12"

 Total
 Metering

 Fluid
 Transfer

 Management
 Chem Feed



Conveying characteristics

The MEMDOS SMART LB dosing pump is designed to run the pressure stroke and suction stroke at different speeds. For low supply rates, for example, the dosing pump performs the suction stroke at the maximum speed and adjusts the speed of the pressure stroke to match the desired supply rate. This produces a constant supply stream, which gives you low-pulsation, smooth dosing.

Settings



Accessories

Even the best pump can be improved – simply by the addition of appropriate accessories.

Suitable sets of accessories, consisting of suction/ discharge tubing, foot valve and injection nozzle, are available for the dosing pumps.



To turn your dosing pump into an efficient dosing system, we recommend using the following accessories:

- Injection nozzles to dose the medium into the main line and to prevent it from flowing back into the pressure line.
- Back pressure and pressure relief valves to increase dosing accuracy or to protect the system against excessive pressure.
- Pulsation dampener to dampen supply flow as well as to reduce discharge flow pulsations.
- Priming aids to significantly ease priming of dosing pumps with low supply volumes per stroke, for large suction heights, highly viscous dosing media, for initial priming or when priming after the system has been idle.
- Suction pressure regulator to prevent medium flow when the dosing pump is not running or to prevent a vacuum being formed in the event of a pipe failure.

Please contact us for more information on accessories and metering pump systems.

Legend④ Pressure relief valve① MEMDOS SMART LB⑤ Electrical agitator② Injection nozzle with
shut-off valve⑥ Dosing tank③ Pulsation dampener⑧ Suction pressure
regulator



Reliable dosing of chemicals

Stepper motor driven diaphragm pumps are particularly suitable for highly accurate, reproducible applications due to their design. Most chemicals can be safely fed into the respective processes using these pumps.

Precision that inspires

The MEMDOS SMART LP series is available in four capacity ranges that deliver between 1.32 and 5.28 gph against pressures of up to 232 psig.

The compact stepper-motor pump, coupled with its intelligent drive concept, combines the big advantages of a solenoid-driven diaphragm dosing pump with the precision of a motor-driven diaphragm dosing pump.

Several different materials and connections are available to comply with specific applications. By using appropriate and recommended materials, the MEMDOS SMART LP can be used in many process applications.

A matching accessory kit with hoses, injection nozzles and suction lines from our comprehensive accessory range means that nothing stands in the way of a quick installation, and you get the best results.

Wide range of applications

The drive of MEMDOS SMART LP's is fully adjustable. The stepper-motor with its wear-free tooth belt drive, ensures a particularly homogeneous and gentle dosing process. Pressure and suction strokes can be performed at different speeds. This produces a constant supply stream, which gives you low-pulsation dosing.

In addition, the MEMDOS SMART LP gives you the possibility to reduce the suction speed in two steps to easily and more precisely supply even viscous dosing media.

The MEMDOS SMART LP doesn't just impress with its elegant design; the graphical display with a multilanguage menu as well as the dosing pump's operation using the integrated keyboard simplifies its use.

If required, the dosing pump can be controlled via an analogue or pulse input. For integration into demanding automation networks, a version with an Ethernet-based MODBUS interface is available.

Over-dosage as a result of unexpected pump shutdown and the associated downtime is ruled out thanks to the diaphragm position detector.



In Short

- Capacity range 1.32 and 5.28 g/h, up to 232 psig
- Power supply 110 240 V AC, -10% / +5%, 50/60 Hz, 25 W
- Graphical display with multi-language menu
- Precise pump adjustments using the keyboard
- Supply amount displayed in various units
- Infinitely variable stroke frequency from 0 to 100%
- Calibration functionality
- External control via standard signal 0/4 20 mA
- External control with impulse increase and reduction
- Fully controllable stepper-motor drive
- Accurate dosing thanks to the double ball valves
- Materials available: PVC, PP, PVDF and stainless steel
- Automatic diaphragm change program
- Compact design, low space requirement
- Integrated dosing head venting device (plastic version)
- Floor and direct wall-mounting possible
- Supplied with connection sets (plastic version)
- Material consistency for the pumps and accessories
- Large-range power supply unit
- Batch dosing with interval and timer functions
- Ethernet interface (optional)



Technical Data							
MEMDOS SMA	RT LP		5 10 15		20		
Delivery capacity at	max. pressure	g/h	1.40	2.85	4.09	5.90	
Max. supply pressur	re	psig	232	145	72	58	
Delivery capacity at	medium pressure	g/h	1.59	2.98	4.22	6.02	
Average back pressu	ıre	psig	116	58	44	29	
Max. stroke frequen	ю	RPM	150				
Suction head for no	n-gassing media	mWS	3				
Max. supply pressur	re	psig	11.6 PSI				
Nominal valve width	ı		DN4				
Voltage supply			110-240 V AC, -10%/+5%, 50/60 Hz				
Power consumption		W	25				
Protection class			IP 65 (with covering caps on teh connections)				
Insulation class			F				
Maight	PVC, PP, PVDF	lbo	~ 4.85				
weight	316 SS	105	~ 7.27				
Max. ambient tempe	erature	°F	with 316SS 113°F (104°F with PVC parts)				
Max. temperature of the	emedium	°F	with 316SS 176°F (with PVC parts 95°F; with PP parts 140°F)				

Flow curves

The flow curves are valid for $68^{\circ}F(20^{\circ}C)$ for water at 100% stroke frequency. The delivery capacity depends on the medium (density and viscosity) and temperature.





Dimensions





MEMDOS SMART LP 5 and 10 with dosing head made of PVC, PP or PVDF





MEMDOS SMART LP 15 and 20 with dosing head made of PVC, PP or PVDF



MEMDOS SMART LP 5 - 20 with dosing head made of stainless steel All dimensions in inches



All dimensions in inches.

Material	Size	Nominal diameter	L
PVC, PP, PVDF	4/6 mm	DN4	1.22"
	1/4" x 3/8"	1/4"	1.34"
	1/4" x 7/16"	1/4" "DN6	1.34"
316 SS / PVDF 1/4" FNP 1/4" FNP	1/4" FNPT	DN4	1.97"
	1/4" FNPT	DN6	2.16"

Total Metering Fluid Transfer Management Chem Feed



Conveying Characteristics



The MEMDOS SMART LP dosing pump is designed to run the pressure stroke and suction stroke at different speeds. For low supply rates, for example, the dosing pump performs the suction stroke at the maximum speed and adjusts the speed of the pressure stroke to match the desired supply rate. This produces a constant supply stream, which gives you a low-pulsation, smooth dosing.

The dosing pump in Slow Motion mode also has the option of reducing the suction speed in two steps. More viscous dosing media can therefore be conveyed easily and more accurately.

Accessories

Suitable sets of accessories, which consists of a suction line, a pressure line and an injection nozzle, are available for the dosing pumps.

Even the best pump can still be improved - namely by the right technical periphery.



To make your dosing pump into an efficient dosing system, we recommend using the following accessories:

- Injection nozzles - to dose the medium in the main line and to prevent it flowing back into the pressure line
- Back pressure loading and relief valves to increase dosing accuracy or to protect the system against too high a pressure
- Pulsation dampener to dampen supply currents as well as to reduce the flow resistance in long pipelines.
- Priming aids to significantly ease priming of dosing pumps with low supply volumes per stroke, for large suction heights, for highlyviscous dosing media or for initial priming or when priming after the system has been laying idle
- Suction pressure regulator to prevent medium flow when the dosing pump is not running or to prevent a vacuum being formed in the event of a pipe burst

For further accessories for your dosing pump, please refer to our dosing pump brochure.

Legend

- ① MEMDOS SMART LP ② Injection nozzle with
- 5 Electrical agitator 6 Dosing tank

Pressure relief valve

- ③ Pulsation dampener

shut-off valve

- ⑦ Shut-off valve
- ⁽⁸⁾ Suction pressure regulator